



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/079,754
Source: OIPÉ
Date Processed by STIC: 3/8/02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,
2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,
Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Raw Sequence Listing Error Summary

01PE

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 101079,754

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
 Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
 Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
 (OLD RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
 (NEW RULES) Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000
- 9 Use of n's or Xaa's
 (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213>
 Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 ✓ Use of <220> Sequence(s) 13+14 missing the <220> "Feature" and associated numeric identifiers and responses.
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.



OIPE

**Does Not Comply
Corrected Diskette Needed**

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/079,754

DATE: 03/08/2002
TIME: 15:22:50

Errors on pp. 45

Input Set : A:\1068 SEQLIST.txt
Output Set: N:\CRF3\03082002\J079754.raw

```

4 <110> APPLICANT: Glenn, Matthew
5      Grigor, Murray R
6      Molenaar, Adrian J
7      Davis, Stephen R
9 <120> TITLE OF INVENTION: Compositions isolated from bovine
10     mammary gland and methods for their use.
13 <130> FILE REFERENCE: 11000.1068
C--> 15 <140> CURRENT APPLICATION NUMBER: US/10/079,754
C--> 15 <141> CURRENT FILING DATE: 2002-02-19
15 <150> PRIOR APPLICATION NUMBER: US 09/699,146
16 <151> PRIOR FILING DATE: 2000-10-27
18 <150> PRIOR APPLICATION NUMBER: US 60162,701
19 <151> PRIOR FILING DATE: 1999-10-29
21 <150> PRIOR APPLICATION NUMBER: US 09/644,190
22 <151> PRIOR FILING DATE: 2000-08-22
24 <150> PRIOR APPLICATION NUMBER: US 60/150,330
25 <151> PRIOR FILING DATE: 1999-08-23
27 <160> NUMBER OF SEQ ID NOS: 15
29 <170> SOFTWARE: FastSEQ for Windows Version 4.0
31 <210> SEQ ID NO: 1
32 <211> LENGTH: 505
33 <212> TYPE: DNA
34 <213> ORGANISM: Bovine
36 <400> SEQUENCE: 1
37 ttgaagatga catcaggtac cgctgtccag gactccacca aatatgaaga tctttatctt      60
38 tgtcttcatt atggctctca tcctagccat gattagagct gattcatctg aagagaaacg      120
39 tcacaggaaa cggaaaaaac atcatagagg atattttcaa caataccagc catatcaacg      180
40 atatccacta aattatcctc ctgcgtatcc atttcttaa aatgctgctt agtaactaca      240
41 ggacatgatt agagagattt ttcacaatga tttttcctac tctttctgtt gtgttgaaaa      300
42 ccatctttca aatgaataaa acaaagaaaa aaaaatcagt caagtagttg cacaacacat      360
43 acttggaatc aaatatcaat attttaaaac ataataatga tagtctctga actatgtaat      420
44 tggttttctac tttcttttct ctgtcactta ccatgcatgc ttaataaatt gatctatcaa      480
45 gcataaaaaa aaaaaaaaaa aaaaaa                                505
47 <210> SEQ ID NO: 2
48 <211> LENGTH: 585
49 <212> TYPE: DNA
50 <213> ORGANISM: Bovine
52 <400> SEQUENCE: 2
53 atggattcga ttggaccaga aaagtggtaa aatcttgatc aaagaaatcc ttaacaatat      60
54 actaaagaaa gaagcttgtc caagggaaaa ttaaaaagcc agcaattgaa gatgacatca      120
55 ggtaccgctg tccaggactc caccaaatat gaagatcttt atctttatct tcattatggc      180
56 tctcatccta gccatgatta gagctgattc atctgaagag aaacgtcaca ggaaacggaa      240
57 aaaacatcat agaggatatt ttcaacaata ccagccatat caacgatatc cactaaatta      300

```

RAW SEQUENCE LISTING

DATE: 03/08/2002

PATENT APPLICATION: US/10/079,754

TIME: 15:22:50

Input Set : A:\1068 SEQLIST.txt

Output Set: N:\CRF3\03082002\J079754.raw

```

58 tctctctgcg tatccatttc cttaaaatgc tgcttagtaa ctacaggaca tgattagaga 360
59 gattttttcac aatgattttt cctactcttt ctgttggtt gaaaaccatc tttcaaata 420
60 ataaaaacaaa gaaaaaaaaa tcagtcaagt agttgcacaa cacatacttg gaatacaata 480
61 tcaatatattt aaaacataat aatgacagtc tctgaactat gtaattggtt tctactttct 540
62 tttctctgtc acttaccatg catgttaat aaattgatct atcaa 585
64 <210> SEQ ID NO: 3
65 <211> LENGTH: 869
66 <212> TYPE: DNA
67 <213> ORGANISM: Bovine
68 <400> SEQUENCE: 3
70 gtccaagggg aaattaaaaa gccagcaatt gaagatgaca tcaggtagcg ctgtccagga 60
71 ctccacacaa tatgaagatc tttatcttta tcttcattat ggctctcatc ctagccatga 120
72 tttagagctga ttcactctga gagaaacgtc acaggaaacg gaaaaaacat catgtatgta 180
73 ttcctctgat aatgtggtat agtataagaa ttttttttac tcagaatatt tattctataa 240
74 gagaatacat atttatcttt gaaatatatc tatacaatga ttagcttatg tgtccattga 300
75 attatctttt tatgatacac taggtaaaga ccccaaagac ttgtgtgctg ttactgttta 360
76 catagaaacc tataatgcc aacctgataa gccagttatt ttctaagaaa agttattttct 420
77 gtttggtaaa taattgcctt cctctgaaga atactgaaat tctaattata ctaagtacaa 480
78 tatacaccta aaggaccata gaggtctgcta aagaacatat attatgtggt cagtttccat 540
79 tttctgattt cttttgggag gtaatgtatg ttaattgacc aagttaaaga agagagacaa 600
80 tttcatattt ttaacatttt tcttaatgat atgtatcact ggtgtctcat attattttga 660
81 catgtctaat caggttgata ggtctccaga attcttacta atacagtaag tactgtact 720
82 gctactgcta agttgcttca gtcagtcca actctgtgcg accccataga cagcagcgca 780
83 ccaggctccc ctgcccctgg gattctccag gcaaggatac tggagtgggt tgccatttca 840
84 gataaattca aatagcttca aaaaaaaaaa 869
86 <210> SEQ ID NO: 4
87 <211> LENGTH: 604
88 <212> TYPE: DNA
89 <213> ORGANISM: Bovine
90 <400> SEQUENCE: 4
92 gaagtatttt cagttctata ataagatctc ataactgatg taattacaaa aacaaatgaa 60
93 ggattttcaag gtatttaaac acagcagttt tctagcaaa aacatctcct gaagcatcag 120
94 aatttcatct ttcactgactg gactccacca aatatgaaga tctttatctt tgtcttcatt 180
95 atggctctca tcttagccat gattagagct gattcatctg aagagaaacg tcacaggaaa 240
96 cggaaaaaac atcatagagg atattttcaa caataccagc catatcaacg atatccacta 300
97 aattatcctc ctgcgtatcc atttccttaa aatgctgctt agtaactaca ggacatgatt 360
98 agagagattt ttcacaatga tttttcctac tctttctggt gtgttgaaaa ccatctttca 420
99 aatgaataaa acaaagaaaa aaaaatcagt caagtagttg cacaacacat acttggaaac 480
100 aaatatcaat attttaaaac ataataatga tagtctctga actatgtaat tggttttctac 540
101 tttctttttc ctgtcactta ccatgcatgc ttaataaatt gatctatcaa gcataaaaaa 600
102 aaaa 604
104 <210> SEQ ID NO: 5
105 <211> LENGTH: 96
106 <212> TYPE: DNA
107 <213> ORGANISM: Bovine
108 <400> SEQUENCE: 5
110 tttcaacaat accagccata tgaacgatat ccactaaatt atcctcctgc gtatccatta 60
111 tcttaaaatg ctgtttacca actacaggac atgata 96
113 <210> SEQ ID NO: 6

```

RAW SEQUENCE LISTING

DATE: 03/08/2002

PATENT APPLICATION: US/10/079,754

TIME: 15:22:50

Input Set : A:\1068 SEQLIST.txt

Output Set: N:\CRF3\03082002\J079754.raw

```

114 <211> LENGTH: 525
115 <212> TYPE: DNA
116 <213> ORGANISM: Bovine
118 <400> SEQUENCE: 6
119 tgaagatgac atcaggtacc gctgtccagg actccaccaa atatgaagat ctttatcttt      60
120 gtcttcatta tggctctcat cctagccatg attagagctg attcatctga agagaaacgt      120
121 cacaggaaac ggaaaaaaca tcatgttgat aggtctccag aattcttact aatacaagag      180
122 gatattttca acaataaccag ccataatcaac gatatccact aaattatcct cctgcgtatc      240
123 catttcctta aaatgctgct tagtaactac aggacatgat tagagagatt tticacaatg      300
124 atttttccta ctctttctgt tgtgttgaaa accatctttc aaatgaataa aacaaagaaa      360
125 aaaaaatcag tcaagtagtt gcacaacaca tacttggaat caaatatcaa tatttttaaaa      420
126 cataataatg atagtctctg aactatgtaa ttggtttcta ctttcttttc tctgtcactt      480
127 accatgcatg cttaataaat tgatctatca agcataaaaa aaaaaa                    525
129 <210> SEQ ID NO: 7
130 <211> LENGTH: 58
131 <212> TYPE: PRT
132 <213> ORGANISM: Bovine
134 <400> SEQUENCE: 7
135 Met Lys Ile Phe Ile Phe Val Phe Ile Met Ala Leu Ile Leu Ala Met
136 1          5          10          15
137 Ile Arg Ala Asp Ser Ser Glu Glu Lys Arg His Arg Lys Arg Lys Lys
138          20          25          30
139 His His Arg Gly Tyr Phe Gln Gln Tyr Gln Pro Tyr Gln Arg Tyr Pro
140          35          40          45
141 Leu Asn Tyr Pro Pro Ala Tyr Pro Phe Pro
142          50          55
144 <210> SEQ ID NO: 8
145 <211> LENGTH: 58
146 <212> TYPE: PRT
147 <213> ORGANISM: Bovine
149 <400> SEQUENCE: 8
150 Met Lys Ile Phe Ile Phe Ile Phe Ile Met Ala Leu Ile Leu Ala Met
151 1          5          10          15
152 Ile Arg Ala Asp Ser Ser Glu Glu Lys Arg His Arg Lys Arg Lys Lys
153          20          25          30
154 His His Arg Gly Tyr Phe Gln Gln Tyr Gln Pro Tyr Gln Arg Tyr Pro
155          35          40          45
156 Leu Asn Tyr Pro Pro Ala Tyr Pro Phe Pro
157          50          55
159 <210> SEQ ID NO: 9
160 <211> LENGTH: 70
161 <212> TYPE: PRT
162 <213> ORGANISM: Bovine
164 <400> SEQUENCE: 9
165 Met Lys Ile Phe Ile Phe Ile Phe Ile Met Ala Leu Ile Leu Ala Met
166 1          5          10          15
167 Ile Arg Ala Asp Ser Ser Glu Glu Lys Arg His Arg Lys Arg Lys Lys
168          20          25          30
169 His His Val Cys Ile Pro Leu Ile Met Trp Tyr Ser Ile Arg Ile Phe

```

RAW SEQUENCE LISTING

DATE: 03/08/2002

PATENT APPLICATION: US/10/079,754

TIME: 15:22:50

Input Set : A:\1068 SEQLIST.txt

Output Set: N:\CRF3\03082002\J079754.raw

```

170          35          40          45
171 Phe Thr Gln Asn Ile Tyr Ser Ile Arg Glu Tyr Ile Phe Ile Phe Glu
172          50          55          60
173 Ile Tyr Leu Tyr Asn Asp
174 65          70
176 <210> SEQ ID NO: 10
177 <211> LENGTH: 58
178 <212> TYPE: PRT
179 <213> ORGANISM: Bovine
181 <400> SEQUENCE: 10
182 Met Lys Ile Phe Ile Phe Val Phe Ile Met Ala Leu Ile Leu Ala Met
183 1          5          10          15
184 Ile Arg Ala Asp Ser Ser Glu Glu Lys Arg His Arg Lys Arg Lys Lys
185          20          25          30
186 His His Arg Gly Tyr Phe Gln Gln Tyr Gln Pro Tyr Gln Arg Tyr Pro
187          35          40          45
188 Leu Asn Tyr Pro Pro Ala Tyr Pro Phe Pro
189          50          55
191 <210> SEQ ID NO: 11
192 <211> LENGTH: 21
193 <212> TYPE: PRT
194 <213> ORGANISM: Bovine
196 <400> SEQUENCE: 11
197 Phe Gln Gln Tyr Gln Pro Tyr Glu Arg Tyr Pro Leu Asn Tyr Pro Pro
198 1          5          10          15
199 Ala Tyr Pro Leu Ser
200          20
202 <210> SEQ ID NO: 12
203 <211> LENGTH: 59
204 <212> TYPE: PRT
205 <213> ORGANISM: Bovine
207 <400> SEQUENCE: 12
208 Met Lys Ile Phe Ile Phe Val Phe Ile Met Ala Leu Ile Leu Ala Met
209 1          5          10          15
210 Ile Arg Ala Asp Ser Ser Glu Glu Lys Arg His Arg Lys Arg Lys Lys
211          20          25          30
212 His His Val Asp Arg Ser Pro Glu Phe Leu Leu Ile Gln Glu Asp Ile
213          35          40          45
214 Phe Asn Asn Thr Ser His Ile Asn Asp Ile His
215          50          55
217 <210> SEQ ID NO: 13
218 <211> LENGTH: 8
219 <212> TYPE: PRT
C--> 220 <213> ORGANISM: Artificial sequence
222 <220> FEATURE:
223 <223> OTHER INFORMATION: Artificial sequence
225 <221> NAME/KEY: VARIANT
226 <222> LOCATION: (1)...(8)
227 <223> OTHER INFORMATION: Xaa = Any Amino Acid

```

- unacceptable, must explain genetic
Source; see error summary sheet, item 11

RAW SEQUENCE LISTING

DATE: 03/08/2002

PATENT APPLICATION: US/10/079,754

TIME: 15:22:50

Input Set : A:\1068 SEQLIST.txt

Output Set: N:\CRF3\03082002\J079754.raw

229 <400> SEQUENCE: 13
W--> 230 Xaa Xaa His His Xaa Xaa Tyr Xaa
231 1 5
233 <210> SEQ ID NO: 14
234 <211> LENGTH: 8
235 <212> TYPE: PRT
236 <213> ORGANISM: Artificial Sequence
238 <220> FEATURE:
239 <223> OTHER INFORMATION: Artificial sequence - Some error
241 <400> SEQUENCE: 14
242 Lys Lys His His Arg Lys Tyr Phe
243 1 5
245 <210> SEQ ID NO: 15
246 <211> LENGTH: 267
247 <212> TYPE: DNA
248 <213> ORGANISM: Bovine
250 <400> SEQUENCE: 15
251 ttgaagatga catcaggtac cgctgtccag gactccacca aatatgaaga tctttatctt 60
252 tgtcttcatt atggctctca tcctagccat gattagagct gattcatctg aagagaaaacg 120
253 tcacaggaaa cggaaaaaac atcatagagg atattttcaa caataccagc catatcaacg 180
254 atatccacta aattatcctc ctgcgtatcc atttccttaa aatgctgctt agtaactaca 240
255 ggacatgatt agagagattt ttcacaa 267

VERIFICATION SUMMARY

DATE: 03/08/2002

PATENT APPLICATION: US/10/079,754

TIME: 15:22:51

Input Set : A:\1068 SEQLIST.txt

Output Set: N:\CRF3\03082002\J079754.raw

L:15 M:270 C: Current Application Number differs, Replaced Current Application No
L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:220 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13
L:230 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13